

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
AIR QUALITY CONTROL GENERAL OPERATING PERMIT**

**SOIL REMEDIATION UNIT GENERAL PERMIT  
GENERAL PERMIT 4**

**THIS GENERAL PERMIT IS TO BE USED FOR:**

**A SOIL REMEDIATION UNIT CONSTRUCTED, RECONSTRUCTED OR  
MODIFIED AFTER JULY 1, 1972, OR**

**A SOIL REMEDIATION UNIT CONSTRUCTED, RECONSTRUCTED OR  
MODIFIED BEFORE JULY 1, 1972;**

**THIS PERMIT MAY ALSO BE USED FOR A ROCK CRUSHER AND  
ASSOCIATED EQUIPMENT INSTALLED, MODIFIED OR RECONSTRUCTED  
AFTER AUGUST 31, 1983, SUBJECT TO 40 C.F.R. 60 SUBPART 000 –  
STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL  
PROCESSING PLANTS, OPERATED IN CONJUNCTION WITH THE  
PERMITTED SOIL REMEDIATION UNIT**

**THIS GENERAL PERMIT EXPIRES September 12, 2008. TO RENEW THIS  
PERMIT THE OWNER OR OPERATOR MUST SUBMIT A RENEWAL  
APPLICATION BETWEEN March 12, 2007 AND March 12, 2008.**

**THIS GENERAL PERMIT SERIAL NUMBER \_\_\_\_\_**

**IS ISSUED TO \_\_\_\_\_**

**COMPANY NAME**

\_\_\_\_\_  
**JOHN F. KUTERBACH  
MANAGER, AIR PERMIT PROGRAM  
Date Issued: September 12, 2003**

### **Qualifying Criteria:**

The facility approved to operate with this general permit (hereafter referred to as “the facility”) is described by SIC code 1629. Alaska law requires operators of soil remediation units (SRU) to obtain an operating permit if the plant meets any of the following criteria:

- a potential to emit greater than 100 tons per year of a regulated air contaminant,
- a source with a rated capacity greater than 100 Million Btu/hr,
- a controlled source with a total rated capacity or equipment throughput greater than 5 tons per hr,
- a controlled source with a rated capacity greater than 50 Million Btu/hr, or
- equipment subject to a federal emission standard, such as asphalt plants in 40 C.F.R. Subchapter I or rock crushers in Subchapter OOO.

Some Rock Crushing is subject to 40 C.F.R. 60, Subpart OOO. A Subpart OOO processing plant is a processing plant that

- has a cumulative rated initial grinding capacity larger than 150 tons per hour for a portable plant or 25 tons per hour for a fixed plant; and
- has equipment that is constructed, reconstructed<sup>1</sup>, or modified (any equipment change that increases air emissions) after August 31, 1983.

**A facility is excluded from using this general permit if any one of the following applies. However, if there is a general permit for the activities listed below, the facility may operate under both permits.**

- a. The facility is subject to a fuel consumption limit or other facility-specific requirement established in a construction permit, or air quality control permit under the former 18 AAC 50.400 (prior to 1/18/97); (This does not include a limit established because a source test was conducted at less than full rated capacity.)
- b. The facility contains:
  - A boiler subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc (see GP-6 for Dc only);
  - A gas turbine;
  - A fuel storage tank subject to 40 C.F.R. 60, Subparts K, Ka (see GP 8.1), or Kb, unless the only requirement that applies is recordkeeping under Subpart Kb, §116b(a) and (b) (See GP-8.3 if there are other requirements that apply);
  - A source subject to any other federal emission standard in 40 C.F.R. 60, 61, or 63;
  - An incinerator;

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<sup>1</sup> Reconstruction as defined by Code of Federal Regulations (40 C.F.R. 60.673).

- A source subject to any standard in 18 AAC 50.055(a) – (f) other than, the general standards for fuel burning equipment in (a)(1), (b)(1), and (c);
- Open Burning at the facility at any time during the permit term;
- Renovation and demolition activities at the facility that would need to comply with the provisions of 40 C.F.R., Part 61, Subpart M, Section 145, National Emission Standard for Asbestos, Standard for Demolition and Renovation;
- Recycling and emissions reduction of Class I and Class II refrigerants at the facility—these activities are subject to 40 C.F.R. 82, Subpart F, Section 82.150; or
- Equipment subject to Subpart OOO that exhausts emissions using mechanically induced flow.

### **Permitted Sources**

This permit authorizes the holder to operate any source identified in the permit application submitted for this permit. The sources need not be in the same immediate location. For example, a crusher operation included in the application may not necessarily be located in the immediate vicinity of the soil remediation unit. At whatever location the equipment operates the operator must comply with the appropriate requirements for that equipment.

### **Permit Duration**

This permit is valid for five years from September 12, 2003. This permit will expire on September 12, 2008. In order to renew this permit submit a renewal application between March 12, 2007 and March 12, 2008. Permit applications are available from the department's web site at <http://www.state.ak.us/dec/dawq/aqm/genperm.htm>

### **Change of Ownership**

If the ownership of the soil remediation unit is changed, the new owners and previous owners must complete a transfer of ownership form and receive authorization to operate from the department before the plant is operated by the new owner. The transfer of ownership form is available to be downloaded from the Air Permit Program web site at <http://www.state.ak.us/dec/dawq/aqm/newpermit.htm> or the form may be obtained by communicating with the nearest Air Permit Program Office.

### **Regulatory Citations and References**

All regulatory citations have been included at the end of each permit condition.

### **Standard Permit Conditions**

Below are listed the Standard Permit Conditions which apply to all permitted sources and appear in all permits issued by the department.

**Standard Permit Conditions: Note that these are standard conditions taken directly from 18 AAC 50.345(b) – (o).**

1. The permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
  - a. an enforcement action,
  - b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or
  - c. denial of an operating permit renewal application. [18 AAC 50.345(c), 5/03/02]
  
2. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition. [18 AAC 50.345(d), 5/03/02]
  
3. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit. [18 AAC 50.345(e), 5/03/02]
  
4. Compliance with permit terms and conditions is considered to be in compliance with those requirements that are
  - a. included and specifically identified in the permit, or
  - b. determined in writing in the permit to be inapplicable. [18 AAC 50.345(b), 5/03/02]
  
5. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [18 AAC 50.345(f), 5/03/02]
  
6. The permit does not convey any property rights of any sort, nor any exclusive privilege. [18 AAC 50.345(g), 5/03/02]
  
7. The permittee shall allow the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to
  - a. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept,
  - b. have access to and copy any records required by the permit,
  - c. inspect any facility, equipment, practices, or operations regulated by or referenced in the permit, and
  - d. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements. [18 AAC 50.345(h), 5/03/02]

8. The permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the permittee shall furnish to the department copies of records required to be kept by the permit. The department may require the permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(i), 5/03/02]

9. The permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.” Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and documents must be certified upon submittal. When certifying a compliance certification, the official’s signature must be notarized.

[18AAC50.345(j), 5/03/02]

10. In addition to any source testing explicitly required by the permit, the permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18AAC50.345(k), 5/03/02]

11. The permittee may request an extension to a source test deadline established by the department. The permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the department’s appropriate division director or designee.

[18AAC50.345(l), 5/03/02]

12. Before conducting any source tests, the permittee shall submit a plan to the department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the permittee will document that operation. The permittee shall submit a complete plan within 60 days after receiving a request under Condition 10 of this permit and at least 30 days before the scheduled date of any test unless the department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18AAC50.345(m), 5/03/02]

13. At least 10 days before conducting a source test, the permittee shall give the department written notice of the date and time the source test will begin.

[18AAC50.345(n), 5/03/02]

14. Within 60 days after completing the source test, the permittee shall submit two copies of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The permittee shall certify the results in the manner set out in Condition 9 of this permit. If requested in writing by the department, the permittee must provide preliminary results in a shorter period of time specified by the department.

[18AAC50.345(o), 5/03/02]

## GP4 - General Permit Conditions

### Rotary Kiln Thermal Desorber & Afterburner

#### 15. Particulate Matter Emissions

<b>Units Constructed, Reconstructed or Modified Before July 1, 1972</b>	<b>Units Constructed, Reconstructed or Modified On or After July 1, 1972</b>
Do not discharge particulate matter concentrations in the exhaust gas which contain more than 0.1 gr/dscf	Do not discharge particulate matter concentrations in the exhaust gas which contain more than 0.05 gr/dscf

[18AAC50.055(b)(1) & (b)(3), 5/03/02]

#### 16. Periodic Source Testing for Particulate Matter

##### 16.1 Source Testing

If the permittee did not submit a particulate matter source test performed within the last five years with the application, a source test must be performed within the first 30 days of operating under this new permit. The source test must be conducted in conformance with Conditions 10 through 14 of this permit.

If the results of the source test exceed more than 90% of the particulate matter emission standard, (either 0.09 gr/dscf or 0.045 gr/dscf depending on date of construction of the soil remediation unit), another source test must be conducted within one year of the date of the last source test.

When conducting a source test, record the information included in Attachment 7. The source test should occur while processing soil that is representative of what the facility normally processes. Record the fines content and soil throughput that represents normal operation.

[18AAC50.055(b)(1) & (b)(3), 5/03/02 ]

##### 16.2 Throughput Rate

After the first source test is performed for the soil remediation unit, do not operate the unit at a production level greater than the maximum throughput measured during a U.S. EPA Method 5 particulate matter source test that showed compliance. This requirement does not apply during subsequent source tests.

[18 AAC 50.055(a)(1), (b)(1) & (b)(3), 5/03/02]

### 16.3 Before processing soil greater than 30% fines

Conduct a particulate matter source test when remediating soil containing 30% fines or greater, as determined by ASTM D422-63 or equivalent unless this was already done during this permit term and that test showed compliance with the particulate standard.

In lieu of conducting a source test, the following equation may be used or another equation proposed by the permittee. The department must approve the equation proposed by the permittee prior to remediating the soil.

F = fines (%)	R = Soil production rate (tons/hr or lb/hr)
X = particulate concentration (gr/dscf)	Test = values from source test in Cond 16
25% = SF safety factor	Actual = what the facility would like to produce

$$F_{\text{actual}} * R_{\text{actual}} = \frac{0.05 \text{ gr / dscf} \times F_{\text{test}} \times R_{\text{test}} \times (1 - SF)}{X_{\text{test}}}$$

Example: A facility source test shows compliance with the particulate standard at a Soil production rate of 10,000 lbs/hr at 15% fines. They have a job remediating soil with 30% fines content. Find the maximum soil production rate that will maintain compliance with the particulate standard. The facility source test showed particulate matter emissions of 0.03 gr/dscf at 15% fines and a soil production rate of 10000 lbs/hr.

$$0.3 * R_{\text{actual}} = \frac{(0.05 \text{ gr / dscf} \times 0.15 \times 10,000 \text{ lbs / hr} \times 0.75)}{0.03 \text{ gr / dscf}}$$

$$R_{\text{actual}} = 6250 \text{ lb/hr}$$

The facility may not exceed 6250 lb/hr while processing soil with 30% fines.

[18 AAC 50.055(b)(1) & (3) 5/03/02 and 18 AAC 50.050(b)(1)&(3) 5/26/72]

### 17. Facilities Using Baghouses

Facilities using baghouses must perform inspections of the equipment and complete necessary maintenance prior to equipment startup and after shutdown periods lasting more than 5 days. The baghouse must be inspected every 30 days of operation at the same location. Worn or damaged bags must be replaced within 72 hours of discovery. Keep a maintenance log of all baghouse inspections and bag replacements. The baghouse must be operated efficiently to control opacity and particulate matter emissions. The pressure drop across the baghouse and outlet temperatures must be monitored and maintained within limits recommended by the manufacturer.

[18AAC50.055(a)(1) & (b)(1) , 5/03/02]

## **18. Facilities Using Scrubbers**

For facilities using scrubbers, every component of the control device must be inspected before the first operation each season and any component that shows signs of deterioration must be repaired or replaced. The scrubber must be operated efficiently to control opacity and particulate matter emissions. The differential pressure across the scrubber, the scrubber water flow rate and scrubber water inlet and outlet temperature must be monitored and maintained within limits recommended by the manufacturer. The pressure drop across the scrubber must be no lower than 70% and no higher than 130% of the average pressure drop for which the most recent source test demonstrated compliance. The scrubber water flow rate must be at least 80% of the average water flow rate for which the most recent source test demonstrated compliance.

[18AAC50.055(a)(1) & (b)(1), 5/03/02]

## **19. Visible Emissions (Opacity)**

Do not reduce visibility through the exhaust more than 20 per cent for more than three minutes in one hour; or do not reduce visibility through the exhaust more than 20 per cent averaged over any six consecutive minutes.

[18AAC50.055(a)(1), 1/18/97 and 5/03/02]

## **20. Soil Remediation Unit Visible Emissions Observations**

Conduct visible emission observations, in accordance with 40 C.F.R. 60, Appendix A, Method 9, within two days of startup at a new location, at least once during a 30-day operating period at the same location, and when facility starts up after a shut down period of more than 5 days. The test should occur when the facility is operating at a load typical of the maximum operation during the reporting period. This requirement does not apply to heaters and insignificant sources. Record the equipment production or operating rate at the time of the Method 9 observation.

Method 9 consists of at least 24 readings, one reading every 15 seconds.

Conduct at least one set of Method 9 readings during each Method 5 particulate matter source test required under this permit.

[18AAC50.055(a)(1), 5/03/02; 18 AAC 50.350(d)(4), 1/18/97]

## **21. Sulfur Oxide Emissions**

Do not emit sulfur dioxide concentrations greater than 500 parts per million averaged over three hours. Do not burn fuel oil (or used oil mixed with fuel oil) with a sulfur content greater than 0.5% by weight. If used oil generated on-site is burned, blend one part used oil with at least three parts fuel oil (25% used oil to 75% fuel oil).

[18AAC50.055(c), 5/03/02]

Do not burn fuel oil with a sulfur content greater than 0.075% by weight while operating in the Sulfur Dioxide Special Protection Areas described in 18AAC50.025 (Dutch Harbor or St. Paul).

[18 AAC 50.110, 5/26/72]

## 22. Fuel & Used Oil Delivery

Keep a delivery receipt for each shipment of fuel and used oil delivered to the facility. If using fuel oil other than ASTM D1 (diesel fuel #1), ASTM D2 (diesel fuel #2), or comparable, test each shipment for the fuel oil sulfur content using the applicable ASTM Method. Acceptable methods include D129-00; D1266-98; D1552-95; D2622-98; D4294-98 and D4045-99. If using ASTM D1 (diesel fuel #1), ASTM D2 (diesel fuel #2), or comparable, keep copies of the fuel delivery records that indicate the ASTM fuel grade as defined in ASTM D396-02 or ASTM D975-02.

If burning used oil generated off-site, test the sulfur content of each shipment of used oil that is generated off-site and record the quantity of fuel accepted or keep supplier's sulfur content analysis. Test any fuel used to fulfill the blending requirement using the applicable test method and record the quantity of fuel used in the blend. Supplier certification is adequate as long as blending does not occur. Samples may be collected by the vendor from batches prepared by the local supplier for delivery to permittee's facility, or by supplier for bulk shipment not blended prior to delivery to the permittee's facility. If burning used oil generated on site, keep records of the quantities.

[18 AAC 50.055(c), 5/03/02; 18 AAC 50.350(d)(3), 1/18/97]

## Stationary Diesel Engines

### 23. Diesel Engines for Power Generation or Mechanical Drive of the Soil Remediation Unit or Crusher Equipment

**(NOTE: These requirements are only applicable to stationary diesel engines i.e. those that remain in one location for 12 months or more, or are used at the same location in two consecutive construction seasons.)**

23.1 Diesel engines may not reduce visibility through the exhaust more than 20 per cent for more than 3 minutes in one hour; or reduce visibility through the exhaust more than 20 per cent averaged over any six consecutive minutes.

[18AAC50.055(a)(1), 1/18/97 and 5/03/02]

23.2 Diesel engines may not discharge particulate matter in the exhaust gas at concentrations higher than 0.05 gr/dscf.

[18AAC50.055(b)(1), 5/03/02]

23.3 Diesel engines may not emit sulfur dioxide in the exhaust gas at concentrations greater than 500 parts per million averaged over a period of three hours.

[18AAC50.055(c), 5/03/02]

23.4 Diesel engines may not burn fuel oil (or used oil mixed with fuel oil) with a sulfur content greater than 0.5% by weight.

[18AAC50.055(c), 5/03/02]

- 23.5 If used oil generated on site is burned, blend one part used oil to three parts fuel oil (25% used oil to 75% fuel oil).

[18AAC50.055(c), 5/03/02]

- 23.6 If operating in one of the Sulfur Dioxide Special Protection Areas described in 18 AAC 50.025 (Dutch Harbor or St. Paul) the diesel engines may not be used for electrical power generation. The facility must operate on highline power. If the diesel engines are used for another purpose other than electrical power generation they may not burn fuel with a sulfur content greater than 0.075% by weight.

[18AAC50.110, 5/26/72; 18AAC50.025, 1/18/97]

**24 Visible Emissions and Particulate Matter Inspections for stationary diesel engines.**

[18 AAC 350(d)(3) 1/18/97]

Monitor visible emissions and particulate matter for stationary diesel engines subject to condition 23 according to the plan in Attachment 4.

## Crushers

**25 Grinding, Crushing and Conveyor Equipment Subject to 40 C.F.R. 60.670 Subpart OOO**

*Equipment which is subject to Subpart OOO is equipment at a fixed plant with a cumulative rating of all initial<sup>2</sup> crushers greater than 25 tons per hour; or equipment at a portable plant with greater than 150 tons per hour cumulative ratings. The pieces of equipment affected by the applicable conditions are rock crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations. Only the pieces of equipment installed, reconstructed<sup>3</sup> or modified after August 31, 1983 are subject to Subpart OOO. Opacity and marking requirements for this equipment are as follows.*

- 25.1 On a component of grinding or crushing equipment without mechanically induced airflow to capture or exhaust particulate matter, do not allow particulate matter emissions to reduce visibility by more than 15 per cent opacity.

[40C.F.R.60.672(c), 7/01/01; 18AAC50.040(a)(2)(FF), 8/15/02]

- 25.2 On a component of a conveyor system associated with the crushing and grinding equipment do not allow particulate matter emissions at transfer points to reduce visibility by more than 10 per cent opacity.

[40C.F.R.60.672(b), 7/01/01; 18AAC50.040(a)(2)(FF), 8/15/02]

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<sup>2</sup> Initial crushers are defined as crushers that process some rock that has not been previously crushed.

<sup>3</sup> Reconstructed is defined in 40 C.F.R. 60.673.

25.3 Grinding, crushing or conveyor equipment subject to the New Source Performance Standard (NSPS) in 40 C.F.R. 60.670 Subpart OOO must be identified by marking with the letters “NSPS” that are plainly visible and are at least three inches high.

**26 Visual Emissions Observations for Subpart OOO Equipment**

If new equipment becomes subject to 40 C.F.R. 60, Subpart OOO, and the initial opacity observations required by 40 C.F.R. 60.11 have not been done, then perform those observations and report the results according to the schedule in 40 C.F.R. 60.11(e).

For existing equipment, inspect each emission point subject to Condition 25.1 or 25.2 using Method 9 of 40 C.F.R. 60, Appendix A at the following times: (Use Attachment 1)

1. within 2 working days after startup at each new location
2. within 2 working days after startup after the processing plant has been shutdown for 30 consecutive days; and
3. at least once in every 14 days of operation.

[18 AAC 50.350(d)(3), 1/18/97; 40 C.F.R. 60.675(c), 7/01/01]

**27 Replacement of Grinding, Crushing and Conveying Equipment**

*There are requirements in order to replace equipment not subject to Subpart OOO and also requirements to replace parts of equipment subject to Subpart OOO. These requirements are summarized below.*

If the crushing, grinding and conveying equipment was all constructed prior to August 31, 1983, it is not subject to the Subpart OOO NSPS. In that case, if parts of this equipment are replaced with equal size (capacity) or smaller (capacity) parts this does not make the facility subject to the NSPS. This does, however, require a report to the department and the U.S. EPA. See below.

If, however, the entire grinding, crushing and conveying system is replaced in its entirety, or components of that system are replaced with larger capacity components this does make that new component subject to the NSPS requirements. This also requires a report to the department and the U.S. EPA. See below.

In the situations described above, both the department and the U. S. EPA must be notified. See the table below:

<b>Equipment Replaced</b>	<b>Report to ADEC and U.S. EPA</b>
Crusher, grinding mill, bucket elevator, bagging operation, enclosed truck or railcar loading station	Rated capacities of the equipment being replaced and the rated capacity of the new equipment
Screening operation	Total surface area and age of old top screen and total surface area of new top screen
Conveyor belt	Width and age of the existing belt and width of the replacement belt
Storage bin	Capacity and age of the existing storage bins

If equipment above for a non NSPS grinding and crushing operation is replaced notify:

Director of Emission Standards and Engineering Division (MD-13) U.S. Environmental Protection Agency Research Triangle Park, North Carolina 27711	Alaska Department of Environmental Conservation Air Permit Program 610 University Avenue Fairbanks, Alaska 99709
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For crushing grinding or conveying equipment that was constructed after August 31, 1983, and is subject to 40 C.F.R. 60 Subpart OOO or components installed after August 31, 1983, which increase capacity of equipment, the department and the U.S. EPA must be notified. The notifications must include the anticipated and actual dates of initial startup of the new equipment or components and must include the precise nature of the change, the present and proposed emission control systems and the change in capacity as a result of the changed components or equipment. Modifications that trigger these reports include increasing the surface area of an initial screen, increasing the width of a conveyor belt or increasing the capacity of any other equipment. Notifications should be sent to the department and U.S. EPA as follows:

[40C.F.R.60.676(a), 7/01/01;18AAC50.200, 1/18/97]

Alaska Department of Environmental Conservation Air Permit Program 610 University Avenue Fairbanks, Alaska 99709	U.S. Environmental Protection Agency Region 10 1200 Sixth Avenue Seattle, Washington 98101
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## Fuel Storage Tanks

### 28 Stationary Fuel Storage Tanks

Soil remediation units may use ASTM D2 (diesel fuel #2) to power diesel engines and fire the burners in the heating drums and afterburners. This diesel fuel must be stored onsite. Diesel fuel meeting ASTM Specifications for ASTM D2 (diesel fuel #2) is a low volatility fuel with a Reid Vapor Pressure typically lower than 0.5 psia. There are requirements for stationary fuel storage tanks in 40 C.F.R. 60 which is the New Source Performance Standard (NSPS) for fuel storage tanks. If fuel tanks at a soil remediation unit contain less than 10,567 gallons of fuel or are portable (i.e. do not remain in one location for longer than 12 months) there are no applicable air quality control requirements. If the size of the fuel tanks at a soil remediation unit using ASTM D2 (diesel fuel #2) exceeds 10,567 gallons and the tanks were constructed after July 23, 1984, the operator must keep accessible records showing the dimensions of each tank and calculations showing the capacity of the storage tank. If a liquid fuel other than ASTM

D2 (diesel fuel #2) is stored in tanks onsite, there may be other requirements from 40 C.F.R. 60 Subpart Kb that may apply.

[18AAC50.040(a)(2)(M), 8/15/02; 40C.F.R.60.116b(a) & (b), 7/01/01]

## Facility-Wide Requirements

### 29 Fugitive Dust.

The operator shall take reasonable precautions to prevent the release of airborne particulate matter and fugitive dust from aggregate piles, treated and untreated soil piles, conveyors and elevators, loading locations, the rotary drum, crushers, screens, baghouse ash discharge, vehicle traffic within the facility boundaries and other sources of fugitive dust.

- a. Reasonable precautions for soil remediation units to prevent particulate matter from becoming airborne include as necessary:
  - installation and use of hoods, fans and dust collectors to enclose and vent dusty materials,
  - other covers and enclosures to prevent generation or release of fugitive dust,
  - cleanup of loose material on work surfaces,
  - minimizing drop distances on conveyor systems and lowering loader buckets to be in contact with the surface of the soil or ground before dumping
  - application of water or suitable chemicals to road surfaces to prevent the generation of fugitive dust.
  - Gratings at the exit of the facility to prevent tracking of dirt or mud onto public roads,
  - For a soil remediation unit located near a business, residence or other inhabited structure, if the wind is blowing toward the structure and emissions from an activity would result in a violation of condition 23, stopping the activity that would cause the violation while the wind blows in that direction.
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- b. Dust Control Plans  
If a location listed in an application or in an application addendum (Attachment 5 of this permit) is within one mile of the nearest inhabited off site structure, the applicant or permittee must attach a fugitive dust control plan as part of that application or addendum. The permittee must also submit a fugitive dust control plan or revision to the plan if requested by the department. The operator must comply with a plan required under this condition.

The plan must be specific to any location named in a permit application or application addendum, and must say what measures will be taken and under

what circumstances the permittee will use them. If necessary, the plan will identify the frequency with which the measures will be applied. A plan does not fulfill this requirement if it only says what measures can be taken for a particular emission source.

[18AAC50.045(d), 1/18/97]

**30 Operation and Maintenance Plan.**

Before operating under this permit, the operator shall prepare and submit an Operations and Maintenance Plan to the Air Permit Program, 555 Cordova Street, Anchorage, Alaska, 99501, to illustrate how the facility will be operated and maintained in order to comply with the emission limits as specified in this permit.

[40C.F.R.60.11(d), 7/01/01; 18AAC50.055(a)(1), (b)(1), 5/03/02]

**31 Air Pollution Prohibited.**

No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 5/26/72]

**32 Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited**

32.1 If emissions present a potential threat to human health or safety, the permittee shall report any such emissions according to condition 37.

32.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the permittee shall investigate the complaint to identify emissions that the permittee believes have caused or are causing a violation of condition 31.

- The permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
  - after an investigation because of a complaint or other reason, the permittee believes that emissions from the facility have caused or are causing a violation of condition 31; or
  - the department notifies the permittee that it has found a violation of condition 31.

32.3 The permittee shall keep records of

- the date, time, and nature of all emissions complaints received;
- the name of the person or persons that complained, if known;

- a summary of any investigation, including reasons the permittee does or does not believe the emissions have caused a violation of condition 31; and
- any corrective actions taken or planned for complaints attributable to emissions from the facility.

32.4 With each semi annual facility operating report the permittee shall include a brief summary report which must include

- the number of complaints received;
- the number of times the permittee or the department found corrective action necessary;
- the number of times action was taken on a complaint within 24 hours; and
- the status of corrective actions the permittee or department found necessary that were not taken within 24 hours.

32.5 The permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the permittee has initiated corrective action within 24 hours of receiving the complaint.

[18AAC50.110, 5/26/72; 18AAC50.346, 5/3/02]

### 33 Location:

- a. The permittee may not move to a new location under this permit that is within 700 yards of the nearest residence.
- b. The operator shall:
  1. provide notice to the department at least 10 days in advance of the move of any soil remediation unit or crusher operation by using the application addendum form in attachment 5 of this permit.
  2. give adequate consideration to siting issues as described in condition 33c when operating or changing locations of a soil remediation unit or crusher permitted to operate under this permit.

[18AAC50.110, 5/26/72; 18AAC50.350(f)(3), 5/3/02]

- c. *If the operator selects a location near residences or other occupied structures and the location results in complaints concerning the air emissions, the department will investigate these complaints. These investigations could result in:*
  1. *the operator being required to prove, by air quality dispersion modeling*

*or other means, that emissions from the plant are not harmful to the neighbors by conducting an ambient air quality investigation under 18AAC50.201.*

2. *the requirement to reduce emissions or implement another control strategy to reduce the ambient impact of those emissions as necessary to ensure that the concentration of air contaminants in the ambient air does not exceed the ambient air quality standards, maximum allowable ambient concentrations or the limitations of 18 AAC 50.110.*
3. *air quality monitoring investigations; or*
4. *the requirement to obtain a site specific permit with requirements tailored to the exact operation contemplated; and.*
5. *Operators must be aware that if additional air dispersion modeling, an investigation under 18AAC50.201 or a site specific permit is needed, these requirements could result in significant delays and expenses.*

### **34 Other Requirements**

- a. Install an afterburner to destroy organic compounds removed from contaminated soil. Operate the equipment so that the concentration of carbon monoxide in the afterburner exhaust does not exceed 100 parts per million corrected to 7 per cent oxygen during operation and shut down operations. This threshold is a 1-hour average based on continuous emission monitor (CEM) 1- minute readings.
- b. Monitor carbon monoxide and oxygen content of afterburner exhaust gases with the CEMS in accordance with 40 C.F.R. 60 Appendix B Performance Specification 3 – Specifications and Test Procedures for O<sub>2</sub> and CO<sub>2</sub> continuous emission monitoring systems and 40 C.F.R. 60 Appendix B Performance Specification 4 – Specifications and Test Procedures for carbon monoxide continuous emission monitoring systems. Report the results of the CEMS monitoring with the semi annual operating reports as described in condition 38.
- c. Monitor the performance of the CEMS using 40 C.F.R. 60 Appendix F Quality Assurance Procedures and Attachment 6 of this permit. Report the results of the Quality Assurance Monitoring with the semi annual operating reports.
- d. Prior to adding soils to the unit heat and maintain the afterburner temperature to at least 1500°F.
- e. Only treat soils that are contaminated with crude oil, liquefied natural gas, gasoline, fuel oil and other non-chlorinated refined petroleum products. Do not treat soil contaminated with hazardous waste listed under the Resource Conservation and Recovery Act (RCRA) or toxic substances listed under the Toxic Substance Control Act (TSCA).
- f. Comply with the VOC control plan submitted with the application. If requested by the department submit a new VOC control plan by a date specified and comply with the new plan.

[18AAC50.110, 5/26/72; 18AAC50.350(f)(3), 5/3/02]

[18AAC50.201, 1/18/97]

**35 Coastal Zone Management.**

If the facility will be located in the Aleutians West

Coastal Resource Service Area (AWCRSA) contact the local or municipal tribal officials, landowners, and the AWCRSA to obtain the necessary local permits or approvals and to find a preferred site for the operation. AWCRSA consists of the islands in the Aleutian Chain from Unalaska to Attu. If the facility will be located in the AWCRSA and stores greater than 5000 gallons of fuel, the facility must comply with AWCRSA policies C-10 (storage of petroleum products) and C-11 (spill containment and cleanup equipment). [*This is a state only requirement.*]

[6AAC50, 1984]

**36 Fees.**

The facilities operated under this permit are subject to two kinds of fees. The department charges Permit Administration fees at the rate of \$78.00 per hour. These fees can be accrued during the initial issuance of the permit for reviewing the application for completeness and compliance with the regulations. Permit Administration fees are also charged for the review of the annual compliance certifications and the review of the facility operating reports. Once a year, no later than March 31, the operator is required to make an estimate of assessable emissions expected to take place during the upcoming state fiscal year from July 1, through the following June 30<sup>th</sup>. Emission Fees are calculated by multiplying the estimated assessable emissions by the emission fee rate listed in 18 AAC50.410. Emission Fees should be estimated using the guidance in Attachment 2 of this permit.

[18AAC50.400 to 18AAC50.430, 1/18/97]

**Table 1  
Monitoring, Record Keeping and Reporting**

Table 1 lists the monitoring, record keeping, and reporting that is required by this permit. Some of these requirements are stated only in this table. Where the monitoring, record keeping, or reporting requirement is more fully explained in another condition of the permit, that condition number is given in the table.

The permittee must report excess emissions or other deviations from all permit conditions according to condition 37.

<b>Condition Number</b>	<b>Monitoring</b>	<b>Record Keeping</b>	<b>Reporting</b>
<b>STANDARD PERMIT CONDITIONS</b>			
<b>1. compliance with permit terms and conditions</b>	<b>Continuous process see specifics below</b>	<b>See specifics for each condition below</b>	<b>Annual compliance certification</b>
<b>2. shutdown no defense in a compliance action</b>	<b>None required</b>	<b>None required</b>	<b>None required</b>
<b>3. permit terms independent</b>	<b>None required</b>	<b>None required</b>	<b>None required</b>
<b>4. compliance with permit terms considered full compliance</b>	<b>None required</b>	<b>None required</b>	<b>None required</b>
<b>5. reopening, revocation or reissuance of permits</b>	<b>None required</b>	<b>None required</b>	<b>None required</b>
<b>6. non conveyance of property rights or privileges</b>	<b>None required</b>	<b>None required</b>	<b>None required</b>
<b>7. inspector access provided on request</b>	<b>Granting access monitoring implicit in action</b>	<b>Log and track inspector visits</b>	<b>Report number of times access granted and records provided</b>
<b>8. furnishing records</b>	<b>Furnishing records monitoring implicit in action</b>	<b>Log and track records requested</b>	<b>Report type and number of records requested and provided</b>

<b>9. certifying reports</b>	<b>Certifying reports monitoring implicit in action</b>	<b>Keep copies of all reports with certifications for five years</b>	<b>Reporting implicit in action of submitting reports</b>
<b>10. perform source tests on demand by ADEC</b>	<b>Performance of source tests monitoring implicit in action</b>	<b>Keep copies of source test results for five years</b>	<b>Report source test results within time limits specified</b>
<b>11. extending source test deadlines</b>	<b>Extending of deadlines monitoring implicit in action</b>	<b>Keep copies of all source test deadline extension requests</b>	<b>Report deadline extension in source test report when submitted</b>
<b>12. source test plan required in advance of source testing</b>	<b>Preparing plan monitoring implicit in action</b>	<b>Keep copies of all source test plans submitted and dates submitted</b>	<b>Include source test plan in source test report when submitted</b>
<b>13. ten day notification before source tests</b>	<b>Sending notification monitoring implicit in action</b>	<b>Keep copies of all 10 day notification letters</b>	<b>Include 10 day notification in source test report when submitted</b>
<b>14. submitting source test reports</b>	<b>Submittal of report monitoring implicit in action</b>	<b>Keep copies of all source test reports submitted</b>	<b>Report submittal fulfills reporting requirement</b>
<b>GENERAL PERMIT CONDITIONS FOR SOIL REMEDIATION UNIT</b>			
<b>15. particulate emissions</b>	<b>Perform source tests if indicated by condition 16.1 or opacity monitoring</b>	<b>Maintain copies of source test and opacity monitoring results</b>	<b>Report results of source tests within 60 days. If standard exceeded use ADEC notification report per condition 37.</b>
<b>16.1 source testing</b>	<b>Monitoring is implicit in performance of source test</b>	<b>Maintain copies of source test and data required in attachment 7</b>	<b>Report results of source tests within 60 days. If standard exceeded use ADEC notification report per condition 37.</b>
<b>16.2 throughput rate</b>	<b>Monitor throughput rate so it does not exceed rate at which source test was performed</b>	<b>Record throughput rate daily</b>	<b>Report daily throughput rate in semi annual facility operating reports</b>

<b>16.3 % fines not to exceed 30%</b>	<b>Monitor fines so that they do not exceed 30% or perform source test or calculation</b>	<b>Record fines content once per job</b>	<b>Report fines content of each job in semi annual facility operating report</b>
<b>17. baghouse inspection requirements</b>	<b>Maintain maintenance logs detailing baghouse inspections and bag replacements</b>	<b>Keep records of inspections for five years. Daily record pressure drop across baghouse and outlet temperatures in relation to manufacturer's recommendations</b>	<b>Include copies of baghouse inspection records in semi annual operating reports Include daily pressure drop readings and outlet temperatures in semi annual operating reports.</b>
<b>18. scrubber inspection requirements</b>	<b>Maintain maintenance logs detailing scrubber inspections and parts replacements</b>	<b>Keep records of scrubber inspections for five years. Daily record differential pressure across the scrubber, water flow rate and temperature in relation to manufacturer's recommendations.</b>	<b>Include scrubber inspection records in semi annual operating reports. Report daily pressure differential readings, water flow rates &amp; temperatures in semi annual operating reports</b>
<b>19. opacity requirements</b>	<b>Perform visual observations of exhaust using EPA Method 9</b>	<b>Keep records of visual observations of exhaust outlets using Attachment 1</b>	<b>Report results of visual observations with semi annual reports. If standard exceeded use ADEC notification report per condition 37</b>
<b>20. SRU visible emissions observations</b>	<b>Perform visual observations of exhaust using EPA Method 9</b>	<b>Maintain record of observations using Attachment 1</b>	<b>Report results with semi annual facility operating reports. If standard exceeded use ADEC notification report per condition 37</b>

<b>21. &amp; 22. sulfur oxide emissions requirements</b>	<b>Control sulfur oxide emissions by limiting sulfur content of fuel burned</b>	<b>Keep records of type and grade of fuel burned and sulfur content from supplier</b>	<b>Provide documentation of type and grade of fuel burned with semi annual reports</b>
<b>STATIONARY DIESEL POWER PLANT REQUIREMENTS</b>			
<b>23.1 opacity requirements</b>	<b>Perform visual observations of exhaust using Smoke/No Smoke or EPA Method 9</b>	<b>Keep records of visual observations of exhaust outlets using log or Attachment 1</b>	<b>Report results of visual observations with semi annual reports. If standard exceeded use ADEC notification report per condition 37.</b>
<b>23.2 particulate emissions not to exceed 0.05 gr/dscf</b>	<b>Perform source tests if indicated by opacity monitoring</b>	<b>Maintain copies of source test and opacity monitoring results</b>	<b>Report results of source tests and opacity monitoring with semi annual reports. If standard exceeded use ADEC notification report</b>
<b>23.3 sulfur oxide emissions</b>	<b>Control sulfur oxide emissions by limiting sulfur content of fuel burned</b>	<b>Keep records of type and grade of fuel burned and sulfur content from supplier</b>	<b>Provide documentation of type and grade of fuel burned with semi annual reports</b>
<b>23.4 sulfur content limits for fuel</b>	<b>Only purchase and burn fuel with sulfur content below 0.5% by weight by specifying ASTM D2 (diesel fuel #2)</b>	<b>Keep records of type and grade of fuel burned and sulfur content from supplier</b>	<b>Provide documentation of type and grade of fuel burned with semi annual reports</b>
<b>23.5 used oil blending</b>	<b>If used oil is burned ensure blended in proper proportions with fuel oil</b>	<b>Keep records of amount of used oil and amount of fuel oil blended at 1:3 ratio</b>	<b>Report fuel blending records along with semi annual reports</b>

<b>23.6 operation in SO2 Special Protection areas</b>	<b>Use highline power in special areas; if diesel burned ensure sulfur content does not exceed 0.075% by weight</b>	<b>Keep records of sulfur content of fuel burned from supplier</b>	<b>Provide documentation of sulfur content of fuel burned with</b>
<b>24. Visible emissions and PM inspections</b>	<b>Perform smoke / no smoke observations or EPA Method 9 per plan in Attachment 4</b>	<b>Record smoke / no smoke observations in log or use Attachment 1 for EPA Method 9 records per plan in Attachment 4</b>	<b>Report results of visible emissions observations with semi annual facility operating reports</b>
<b>GRINDING and CRUSHING EQUIPMENT</b>			
<b>25.1 grinding or crushing opacity</b>	<b>Use visual observation EPA Method 9 to observe emission points</b>	<b>Keep a written record of visual observations of emission points</b>	<b>Submit written records of visual observations with semi annual operating reports. If standard is exceeded use ADEC Notification form.</b>
<b>25.2 conveyor opacity requirements</b>	<b>Use visual observation EPA Method 9 to observe emission points</b>	<b>Keep a written record of visual observations of emission points</b>	<b>Submit written records of visual observations with semi annual operating reports. If standard is exceeded use ADEC Notification form.</b>
<b>25.3 marking requirements</b>	<b>Marking “NSPS” on equipment subject to 40C.F.R.60 Subpart OOO serves as monitoring</b>	<b>Keep a photographic record of all equipment marked “NSPS” and maintain for five years after equipment replaced or retired</b>	<b>Provide photographic records of “NSPS” markings to the department on request</b>

<p><b>26. Visible emissions observations for crusher</b></p>	<p><b>Use EPA Reference Method 9 to observe emissions</b></p>	<p><b>Record observations in Attachment 1</b></p>	<p><b>Report results of observations in semi annual facility operating reports.</b></p>
<p><b>27. replacement of grinding, crushing or conveying equipment</b></p>	<p><b>Maintain a log and keep track of components of grinding, crushing or conveying equipment that is replaced</b></p>	<p><b>When equipment is replaced as described in condition 24 describe changes in correspondence as specified</b></p>	<p><b>Reporting consists of providing copies of the correspondence required by the condition to the department and EPA.</b></p>
<p><b>28. fuel storage tank requirements</b></p>	<p><b>Maintain a log of the fuel storage tanks in use at the facility including their capacity and the types of fuel stored in them and the dates the tanks were constructed</b></p>	<p><b>If required by the condition maintain records showing the dimensions of each tank and calculations showing the storage capacity of each tank</b></p>	<p><b>Maintain the records of the tank dimensions and methods of calculations as long as the tanks are in use at the facility</b></p>
<p><b>FACILITY WIDE REQUIREMENTS</b></p>			
<p><b>29. fugitive dust requirements</b></p>	<p><b>Perform a daily inspection of sources of fugitive dust and take necessary actions to keep dust down. Submit and comply with fugitive dust control plan if necessary</b></p>	<p><b>Maintain a log of a daily inspection of sources of fugitive dust and actions taken to keep fugitive dust down. Maintain a copy of the fugitive dust control plan for life of the facility.</b></p>	<p><b>Report copies of log entries concerning fugitive dust with semi annual reports. Report activities undertaken to maintain compliance with fugitive dust control plan if any.</b></p>
<p><b>30. operation and maintenance plan</b></p>	<p><b>Plan submittal serves as implicit monitoring</b></p>	<p><b>Maintain equipment maintenance logs in accordance with O &amp; M Plan</b></p>	<p><b>Submit copies of logs with semi annual reports</b></p>
<p><b>31 and 32 air pollution prohibited</b></p>	<p><b>Monitoring consists of responding to complaints and taking corrective action</b></p>	<p><b>Maintain a log of all complaints received and actions taken to correct any deficiencies noted</b></p>	<p><b>Report complaints and incidents and actions taken in log entries with the semi annual reports</b></p>

<b>33. Location considerations</b>	<b>Ensure site selection considers impact of operations on ambient air and nearby inhabited structures</b>	<b>Maintain records of Borough approvals for sites selected and records of distances from nearest inhabited structures</b>	<b>Provide certified and notarized application addendum for relocation with all data requested concerning Borough approvals and locations etc.</b>
<b>34 a install afterburner and maintain CO concentrations below 100 ppm</b>	<b>Afterburner installation implicit in design</b>	<b>Maintain record that shows CO concentrations less than 100 ppm with CEMS</b>	<b>Report CO concentrations with semi annual operating reports</b>
<b>34 b and 34 c install CEMS monitor CO and O2 and follow QA procedures</b>	<b>CEMS installation to be documented in application; monitor CO and O2 levels in exhaust</b>	<b>Follow and document Quality Assurance Procedures for CEMs in Attachment 6</b>	<b>Report and document that QA procedures in Attachment 6 followed in semi annual reports</b>
<b>34 d pre-heat of afterburner</b>	<b>Record afterburner temperatures before start up</b>	<b>Maintain record of afterburner temperatures prior to startup</b>	<b>Report initial afterburner temperatures with semi annual operating reports</b>
<b>34 e only remediate petroleum contaminated soil</b>	<b>Monitor characteristics of soil remediated with lab tests</b>	<b>Keep records of lab results of remediated soil characteristics</b>	<b>Provide copies of lab reports for soil remediated with semi annual operating reports.</b>
<b>34 f comply with VOC plan</b>	<b>Submit VOC plan with application</b>	<b>Keep records of adherence to VOC plan</b>	<b>Submit records of VOC plan compliance with semi annual operating reports</b>
<b>35. coastal zone management</b>	<b>Locating a facility in the Aleutian Islands requires coordination with local authorities and serves as implicit monitoring</b>	<b>Maintain copies of all correspondence concerning location of facility until 5 years after plant is removed from Aleutians</b>	<b>Provide copies of correspondence with semi annual report when facility is first located in Aleutians</b>

<b>36. fees</b>	<b>Timely payment of fees and emission fee estimates is monitored by the department</b>	<b>The department maintains records of permit administration fees and emission fees billed, paid and outstanding</b>	<b>In the annual compliance certification report assert compliance by certifying that all fees have been paid and estimates made on time.</b>
<b>37. Excess emissions reporting</b>	<b>Submission of report is its own monitoring</b>	<b>Use report form in Attachment 3 and report per condition 37</b>	<b>Submit copies of reports with semi annual facility operating report</b>

## Additional Record Keeping Guidance

In addition to the Monitoring, Record Keeping and Reporting in the above table, the information below must be gathered and included with the semi annual operating reports, ADEC Notification reports or emission fee calculation submittals.

<b>Date</b>	<b>Record date of operation</b>
<b>Time of operation</b>	<b>Record start and stop times and hours</b>
<b>Tons of soil treated per day</b>	<b>Record tons of soil treated per day</b>
<b>Tons of soil treated per year</b>	<b>Record tons of soil treated per year</b>
<b>Maximum hourly treatment rate</b>	<b>Record treatment rate tons/hr</b>
<b>Average fines percentage per job</b>	<b>Record average fines percentage per job</b>
<b>Baghouse temperature daily</b>	<b>Record baghouse temperature degrees F</b>
<b>Differential pressure across baghouse</b>	<b>Record pressure differential inches H<sub>2</sub>O</b>
<b>Scrubber differential pressure</b>	<b>Record Min/Max pressure inches H<sub>2</sub>O</b>
<b>Scrubber minimum water flow rate</b>	<b>Record scrubber water flow rate gal/hr</b>
<b>Afterburner outlet temperature</b>	<b>Record the afterburner outlet temp °F</b>
<b>Diesel generator operation daily</b>	<b>Record power produced – kilowatt hours</b>
<b>Diesel generator operation annually</b>	<b>Record annually kW hours produced</b>
<b>Amount of fuel consumed daily</b>	<b>Record fuel consumed in gals or MMscf</b>
<b>Amount of fuel consumed annually</b>	<b>Record cumulative amount</b>
<b>Deviations from Permit Conditions</b>	<b>Record on ADEC Notification Report</b>

## Reporting Requirements

The department requires a facility operator using this general permit to perform four types of reports: (1) reporting emissions that have the potential to violate a permit condition, (2) semiannual operating reports, (3) notification of replacement of certain equipment, and (4) annual compliance certifications.

### 37. Excess Emissions and Permit Deviation Reports.

#### 37.2 When to Report

E1. The permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the permittee has initiated corrective action within 24 hours of receiving the complaint

E2. Except as provided in condition E1 for Air Pollution Prohibited, the permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report
  - (i) emissions that present a potential threat to human health or safety; and
  - (ii) excess emissions that the permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
  - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions c(ii) and c(iii);
  - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under condition c(i); and
  - (iii) for failure to monitor, as required in other applicable conditions of this permit.

#### 37.3 How to Report

When reporting excess emissions under condition E2, the permittee must report using either the department's on-line form, which can be found at [www.dec.state.ak.us/awq/excess/report.asp](http://www.dec.state.ak.us/awq/excess/report.asp), or, if the permittee prefers, the form contained in Attachment 3 of this permit. The permittee must provide all information called for by the form that is used.

When reporting a permit deviation under condition E2, the permittee must report using the form contained in Attachment 3 of this permit, unless the department has provided an on-line form for permit deviations by the time the report is due. The permittee must provide all information called for by the form used.

If requested by the department, the permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

For excess emissions which may present a **threat to human health or safety** (Condition 36 E2 a. i.):

Report as soon as possible, at one of the following numbers:

Central Alaska	269-3063	Fax	269-7648
Northern Alaska	451-2121	Fax	451-2362
Southeast Alaska	465-5340	Fax	465-2237

Outside of normal business hours: 1-800-478-9300

Fax a completed ADEC Notification form (Attachment 3) within 24 hours to the Anchorage Air Permit Program office at (907) 269-7508.

#### 37.4 Immediate Reporting:

Notify the department within two days of a pollution-control equipment breakdown. Provide a schedule for repair of the pollution control equipment and do not operate the plant after the breakdown until repairs have been completed.

[18 AAC 50.350(i)(1), 1/18/97]

**38. Semiannual Facility Operating Report:**

[18 AAC 50.350(d)(3), 18 AAC 50.350(i)(5), 1/18/97]

Submit the following information to the department :

Submit three copies, including the original, of this semi -annual facility operating report to:

Alaska Department of Environmental Conservation  
Air Permit Program  
610 University Ave  
Fairbanks, Alaska 99709

Facility Name \_\_\_\_\_ Date: \_\_\_\_\_ Permit Number \_\_\_\_\_

A Semiannual Operating Report for  
(Select the correct operating period)

- 10/1/\_\_\_ - 3/31/\_\_\_ Due on **April 30**
- 4/1/\_\_\_ - 9/30/\_\_\_ Due on **October 30**

Did the facility deviate from any permit requirements or a fugitive dust or VOC control plan?

- Yes
- No

If yes, explain (1) how you deviated from the plan, (2) the cause of the deviation, and (3) why it was necessary.

Attach:

(a) Copies of all visible emission reading results.

Report results of visible emission observations and particulate matter testing as required by the monitoring plan for diesel engines in Attachment 4.

(b) Copies of all particulate matter performance test reports.

(c) A description of any complaints received, including:

- the number of complaints received;
- the number of times the permittee or the department found corrective action necessary;
- the number of times action was taken on a complaint within 24 hours; and
- the status of corrective actions the permittee or department found necessary that were not taken within 24 hours

(d) A list of any deviations from permit conditions; include:

- The date or period
- Equipment involved
- The permit condition
- The nature of the deviation
- Actions taken to solve the problem.

List Fuel Delivery dates and grades:

Dates:	Quantity:	Fuel Grade:or	Sulfur Content:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

GP4 – Soil Remediation Unit General Permit

_____	_____	_____	_____
_____	_____	_____	_____

List Off-Site Used Oil Delivery:

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

List Burned Used Oil (generated on-site):

Dates:	Quantity:	Sulfur Content:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

List the total amount of fuel used at the facility for each month of the reporting period.

If you blended used oil with fuel to meet the sulfur requirement, how did you ensure that the mix achieved less than a 0.5% Sulfur content by weight?

How did you ensure your facility blended the amount of used oil generated on-site to achieve a 1 to 3 mix (25% used oil to 75% fuel oil)?

List the daily soil treatment rate, the total number of operation hours, the peak hourly rate and percent fines.

Report any deviations from the facility's submitted Operations and Maintenance Plan.

Submit any CEMS hourly average that exceeds the permitted limit and averaging times. Report the highest hourly average for the reporting period. Report the results of Quality Assurance Monitoring.

Based on information and belief formed after reasonable inquiry, I certify that the facility meets the qualifying criteria and that the statements and information in and attached to this document are true, accurate, and complete.

_____	_____	_____
Signature	Printed Name	Title

**Annual Compliance Certification**

Certify compliance annually by February 1 of each year for the period from January 1 to December 31 of the previous year in accordance with the format below. Submit two copies and the original to ADEC and one copy to the U.S. EPA. Submit the annual compliance certification to the addresses below:

ADEC Air Permit Program 610 University Ave Fairbanks, Alaska 99709	US EPA Region 10 Office of Air Quality M/S OAQ-107 1200 6 <sup>th</sup> Avenue, Seattle, Washington 98101
--------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------

Permittee: \_\_\_\_\_ Facility Name \_\_\_\_\_

Permit Number \_\_\_\_\_ Period of Certification \_\_\_\_\_

Condition Number And Description	Compliance Status	Continuous/ Intermittent	Method to determine compliance
<b>STANDARD PERMIT CONDITIONS</b>			
<b>1. – 6.</b>	<b>These conditions place no certification obligation on permittee.</b>		
<b>7. inspector access provided on request</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Dates access granted or not requested <input type="checkbox"/> Other (attach description & documentation)
<b>8. furnishing records</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Dates submitted <input type="checkbox"/> Other (attach description & documentation)
<b>9. certifying reports</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> All reports/ documents certified <input type="checkbox"/> Other (attach description & documentation)
<b>10. – 14. source test requirements</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> source tests performed <input type="checkbox"/> plans submitted <input type="checkbox"/> reports submitted <input type="checkbox"/> Other (attach description)

<b>GENERAL PERMIT CONDITIONS FOR SOIL REMEDIATION UNIT</b>			
<b>15. particulate emissions</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> source test indicates no exceedance <input type="checkbox"/> no opacity readings exceed limits <input type="checkbox"/> Other (attach description & documentation)
<b>16.1 source testing</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> source test passed in last 5 years <input type="checkbox"/> no pm emissions readings exceed 90% of standard <input type="checkbox"/> Other (attach description & documentation)
<b>16.2 throughput rate not to exceed source test rate</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> throughput rate of last successful source test not exceeded <input type="checkbox"/> Other (attach description & documentation)
<b>16.3 fines content</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> 30% fines not exceeded <input type="checkbox"/> source test or calculation performed <input type="checkbox"/> Other (attach description & documentation)
<b>17. baghouse inspection requirements</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> baghouse inspection records kept <input type="checkbox"/> damaged bags replaced in 72 hrs <input type="checkbox"/> all operating parameters monitored and recorded <input type="checkbox"/> Other (attach description & documentation)

<p><b>18. scrubber inspection requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> scrubber inspection records kept  <input type="checkbox"/> damaged parts replaced  <input type="checkbox"/> operating parameters monitored and recorded  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>19. opacity requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> no opacity readings in excess of standard  <input type="checkbox"/> opacity reading records submitted  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>20. SRU Visible Emissions observations</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all VE observations kept  <input type="checkbox"/> opacity does not exceed limits  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>21. sulfur oxide emissions requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> fuel delivery records kept  <input type="checkbox"/> fuel blending records kept  <input type="checkbox"/> no fuel burned exceeded sulfur limits  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>22. fuel oil shipments not to exceed sulfur requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all records of fuel deliveries kept  <input type="checkbox"/> fuel tested to ASTM standards  <input type="checkbox"/> Other (attach description &amp; documentation)</p>

<b>STATIONARY DIESEL POWER PLANT REQUIREMENTS</b>			
<b>23.1 opacity requirements</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> opacity observation records kept <input type="checkbox"/> opacity limits not exceeded <input type="checkbox"/> Other (attach description & documentation)
<b>23.2 particulate emissions</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> EPA Method 5 source test records kept <input type="checkbox"/> 15% opacity not exceeded <input type="checkbox"/> Other (attach description & documentation)
<b>23.3 sulfur oxide emissions</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> fuel delivery records kept <input type="checkbox"/> no fuel sulfur content exceeded 0.5% by weight <input type="checkbox"/> used oil blended <input type="checkbox"/> Other (attach description & documentation)
<b>23.4 sulfur content limits for fuel</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> fuel delivery records kept <input type="checkbox"/> no fuel sulfur content exceeded 5% by weight <input type="checkbox"/> used oil blended <input type="checkbox"/> Other (attach description & documentation)
<b>23.5 used oil blending</b>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> all fuel oil blending records kept <input type="checkbox"/> Other (attach description & documentation)

<p><b>23.6 Operation in special protection areas</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> did not operate in special protective areas  <input type="checkbox"/> used highline power  <input type="checkbox"/> fuel sulfur content did not exceed 0.075%  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>24. Visible emissions observations for diesel engines</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> All VE observations records kept  <input type="checkbox"/> All VE observations submitted with semi annual operating reports  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>GRINDING &amp; CRUSHING EQUIPMENT</b></p>			
<p><b>25.1 grinding or crushing opacity</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> visible emissions testing records kept  <input type="checkbox"/> visible emissions did not exceed 15% opacity  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>25.2 conveyor opacity requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> visible emissions testing records kept  <input type="checkbox"/> visible emissions did not exceed 10% opacity  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>25.3 marking requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all photographic records kept  <input type="checkbox"/> all NSPS equipment marked properly  <input type="checkbox"/> Other (attach description &amp; documentation)</p>

<p><b>26. SRU visible Emissions observations</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable                  (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all VE observations kept  <input type="checkbox"/> opacity does not exceed limits  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>27. replacement of grinding, crushing or conveying equipment</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable                  (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all records kept and notifications made  <input type="checkbox"/> no equipment replaced  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>28. fuel storage tank requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable                  (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all records of tank dimensions and capacities kept  <input type="checkbox"/> tanks are too small or too old to require record keeping  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>FACILITY WIDE REQUIREMENTS</b></p>			
<p><b>29. fugitive dust requirements</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable                  (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> all reasonable precautions taken  <input type="checkbox"/> fugitive dust plan complied with  <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>30. operation and maintenance plan</b></p>	<p><input type="checkbox"/> In Compliance  <input type="checkbox"/> Not In Compliance  <input type="checkbox"/> Not applicable                  (attach explanation)</p>	<p><input type="checkbox"/> Continuous  <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> All O &amp; M records kept  <input type="checkbox"/> O &amp; M plan submitted  <input type="checkbox"/> O &amp; M plan complied with  <input type="checkbox"/> Other (attach description &amp; documentation)</p>

<p><b>31. and 32 air pollution prohibited</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> records of complaints kept <input type="checkbox"/> complaints investigated and corrective action taken as necessary <input type="checkbox"/> Other (attach description &amp; documentation)</p>
<p><b>33. Location considerations</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> relocation application addenda filed 10 days in advance <input type="checkbox"/> facility not moved</p>
<p><b>34 a afterburner installation</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> CO concentrations below 100 ppm by CEMS readings <input type="checkbox"/> Other</p>
<p><b>34 b and 34 c CEMS installation and QA procedures</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> QA procedures in Attachment 6 followed <input type="checkbox"/> QA documentation provided in semi annual reports</p>
<p><b>34 d pre-heat of afterburner</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> records of pre-heat temperatures kept <input type="checkbox"/> pre-heat temperatures reported in semi annual reports</p>
<p><b>34 e Type of contamination allowed to be remediated</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> only petroleum contaminated soils remediated by lab report <input type="checkbox"/> lab reports submitted with semi annual operating reports</p>
<p><b>34 f Compliance with VOC Plan</b></p>	<p><input type="checkbox"/> In Compliance <input type="checkbox"/> Not In Compliance <input type="checkbox"/> Not applicable (attach explanation)</p>	<p><input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent</p>	<p><input type="checkbox"/> Records of compliance with VOC plan kept <input type="checkbox"/> records submitted with semi annual operating reports</p>



### Attachment 1 -Visible Emissions Forms Page 1 of \_\_\_\_\_

When doing readings: Maintain a distance of at least 15 feet from the emission point; When possible while still conforming to Method 9, select a position to minimize interference between sources; If interference cannot be avoided between sources, use the least stringent opacity standard that applies to any of the sources involved; and If wet dust suppression is used, read the part of the plume where there are no visible emissions caused by water mist.

**Certified Observer** \_\_\_\_\_

Company \_\_\_\_\_

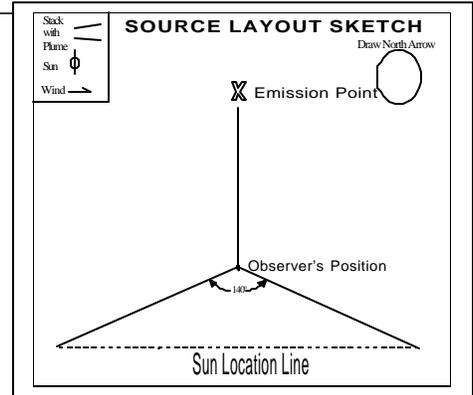
Location \_\_\_\_\_

Test No. \_\_\_\_\_ Date \_\_\_\_\_

Soil Remediation: Source \_\_\_\_\_

Production Rate: \_\_\_\_\_ Tons/hr

Hrs. of observation: \_\_\_\_\_



Clock Time	Initial			Final
Observer location Distance to discharge				
Direction from discharge				
Height of observer point				
Background description				
Weather conditions Wind Direction				
Wind speed				
Ambient Temperature				
Relative humidity				
Sky conditions: (clear, overcast, % clouds, etc.)				
Plume description: Color				
Distance visible				
Water droplet plume? (attached or detached?)				
Other information				

Use the procedures specified in 40 C.F.R. 60, Appendix A, Method 9 to perform this observation



**Attachment 2. :  
Soil Remediation Unit Emission Fee Calculation Guide**

In order to calculate emission fees for a soil remediation unit the following information must be known for each plant:

1. tons of soil treated in the past year.
2. kilowatt hours produced by the diesel generators in past year (estimate by multiplying the kW rating of the generator times the number of hours operated.)
3. number of gallons of diesel burned in past year.

That is all the information required to estimate the emission fees.

Provide the emission estimate to the department no later than March 31<sup>st</sup> each year.

<b>SOIL REMEDIATION UNIT EMISSION FEE CALCULATIONS</b>	
<b>NO<sub>x</sub> TPY (A) = tons of soil treated multiplied by</b>	
<b>0.00006 for diesel fired</b>	<b>0.000013 for nat gas fired</b>
<b>CO TPY (B) = tons of soil treated multiplied by</b>	
<b>0.0002 for diesel fired</b>	<b>0.0002 for nat gas fired</b>
<b>NO<sub>x</sub> TPY (C1) from diesel generators Multiply kW hours by 0.000020786 = C1</b>	
<b>CO TPY (C2) from diesel generators Multiply kW hours by 0.000004479 = C2</b>	
<b>SO<sub>2</sub> TPY (D) = gals of diesel burned for the year multiplied by 0.0000355</b>	
<b>Determine Total NO<sub>x</sub> A + C1 = X</b>	<b>Determine Total CO B + C2 = Y</b>
<b>If either X or Y or D is less than 10 tons do not include in calculation below.</b>	
<b>NO<sub>x</sub> (X) + CO (Y) + SO<sub>2</sub> (D) = Total emissions in tons per year (TPY)</b>	
<b>Total emissions (TPY) x current rate (\$/ton)* = Emission Fee in \$</b>	

The current emission fee rate (\$/ton) is shown at 18AAC50.410.

Send Emission Estimate to:  
ADEC Air Permits  
Assessable Emission Estimate  
410 Willoughby Avenue, Suite 303  
Juneau, Alaska 99801

Or FAX to (907) 465 5129 PLEASE MARK FAX "EMISSION FEE ESTIMATE"

**ATTACHMENT 3: ADEC Notification Form**

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Company Name \_\_\_\_\_

Facility Name \_\_\_\_\_

**Reason for notification:**

**Excess Emissions**  
*If you checked this box*  
*Fill out section 1*

**Other Deviation from Permit Condition**  
*If you checked this box*  
*fill out section 2*

When did you discover the Excess Emissions or Other Deviation:

Date: \_\_/\_\_/\_\_ Time:\_\_:\_\_

**Section 1. Excess Emissions**

**(a) Event Information (Use 24-hour clock):**

	<b>START Time:</b>	<b>END Time:</b>	
		<b>Duration (hr:min):</b>	
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
		<b>Total:</b>	_____:

**(b) Cause of Event (Check all that apply):**

START UP                       UPSET CONDITION                       CONTROL EQUIPMENT  
 SHUT DOWN                       SCHEDULED MAINTENANCE                       OTHER \_\_\_\_\_

*Attach a detailed description of what happened, including the parameters or operating conditions exceeded.*

**(c) Sources Involved:**

*Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.*

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

**(d) Emission Limit Potentially Exceeded**

*Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.*

Permit Condition	Limit	Emissions Observed
_____	_____	_____
_____	_____	_____

**(e) Excess Emission Reduction:**

*Attach a description of the measures taken to minimize and/or control emissions during the event.*

**(f) Corrective Actions:**

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

**(g) Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable?

YES             NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

YES             NO

**Section 2. Other Permit Deviations**

**(a) Sources Involved:**

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control
Device			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**(b) Permit Condition Deviation:**

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation
_____	_____
_____	_____
_____	_____

**(c) Corrective Actions:**

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

\_\_\_\_\_  
Printed Name:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Date

## Attachment 4

### Visible Emission and Particulate Matter Monitoring Plan for Stationary Diesel Engines

**38. Visible Emissions Monitoring.** The Permittee shall observe the exhaust of stationary diesel engines subject to condition 24 of this permit for visible emissions using either the Method 9 Plan under condition 38.1 or the Smoke/No-Smoke Plan under condition 38.2. The permittee may change visible-emissions plans for a source at any time unless prohibited from doing so by condition 38.3.

**38.1 Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

- a. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that the engine operates.
- b. Less Frequent Method 9 Observations. After observing emissions for three consecutive operating months under condition 38.1a, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least once for 18 minutes during the first calendar month that the engine operates for each construction season (or for each calendar year, if the operation does not shut down seasonally.)

If the facility operates during more than six calendar months in a year, repeat the observations during the seventh calendar month that the engine operates during the calendar year.

- c. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that source to at least monthly intervals, until the criteria in condition 38.1b for semiannual monitoring are met.

**38.2 Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

- a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that a source operates.

- b. Reduced Monitoring Frequency. After the source has been observed on 30 consecutive operating days, if the source operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that a source operates.
- c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of condition 38.1 or perform the corrective action required under condition 38.3

**38.3 Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of condition 38.2, then the permittee shall either follow the Method 9 plan of condition 38.1 or

- a. initiate actions to eliminate smoke from the source within 24 hours of the observation;
- b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and
- c. after completing the actions required under condition 38.3a,
  - (i) take Smoke/No Smoke observations in accordance with condition 38.2
    - (a) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
    - (b) continue as described in condition 38.2b; or
  - (ii) if the actions taken under condition 38.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of condition 38.3c(i)(a), then observe the exhaust using the Method 9 Plan unless the department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under condition 38.2a.

**39. Visible Emissions Record Keeping.** The permittee shall keep records in accordance with this condition 39.

39.1 If using the Method 9 Plan of condition 38.1,

- a. the observer shall record

- (i) the name of the facility, emissions source and location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet (Attachment1);
  - (ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;
  - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
  - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation Record (Attachment 1); and
  - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;
- b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;
  - c. calculate and record the highest 18-consecutive-minute average observed.
- 39.2 If using the Smoke/No Smoke Plan of condition 38.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the department:
- a. the date and time of the observation;
  - b. the ID of the source observed;
  - c. whether visible emissions are present or absent in the exhaust;
  - d. a description of the background to the exhaust during the observation;

- e. if the source starts operation on the day of the observation, the startup time of the source;
- f. name and title of the person making the observation; and
- g. operating rate (load or fuel consumption rate).

**40. Visible Emissions Reporting.** The permittee shall report visible emissions as follows:

40.1 include in each facility operating report:

- a. which visible-emissions plan of condition 38 was used for each source; if more than one plan was used, give the time periods covered by each plan;
- b. for each source under the Method 9 Plan,
  - (i) copies of the observation results (i.e. opacity observations) for each source that used the Method 9 Plan, except for the observations the permittee has already supplied to the department; and
  - (ii) a summary to include:
    - (a) number of days observations were made;
    - (b) highest six-minute average observed; and
    - (c) dates when one or more observed six-minute averages were greater than 20 percent;
- c. for each source under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and
- d. a summary of any monitoring or record keeping required under condition 38 that was not done;

40.2 report under condition 37 for excess emissions and permit deviation reports:

- a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and
- b. if any monitoring under condition 38 was not performed when required, report within three days of the date the monitoring was required.

**41. Particulate Matter Monitoring for Diesel Engines.** The permittee shall conduct source tests on stationary diesel engines subject to condition 24 to determine the concentration of particulate matter (PM) in the exhaust of a source in accordance with this condition 41.

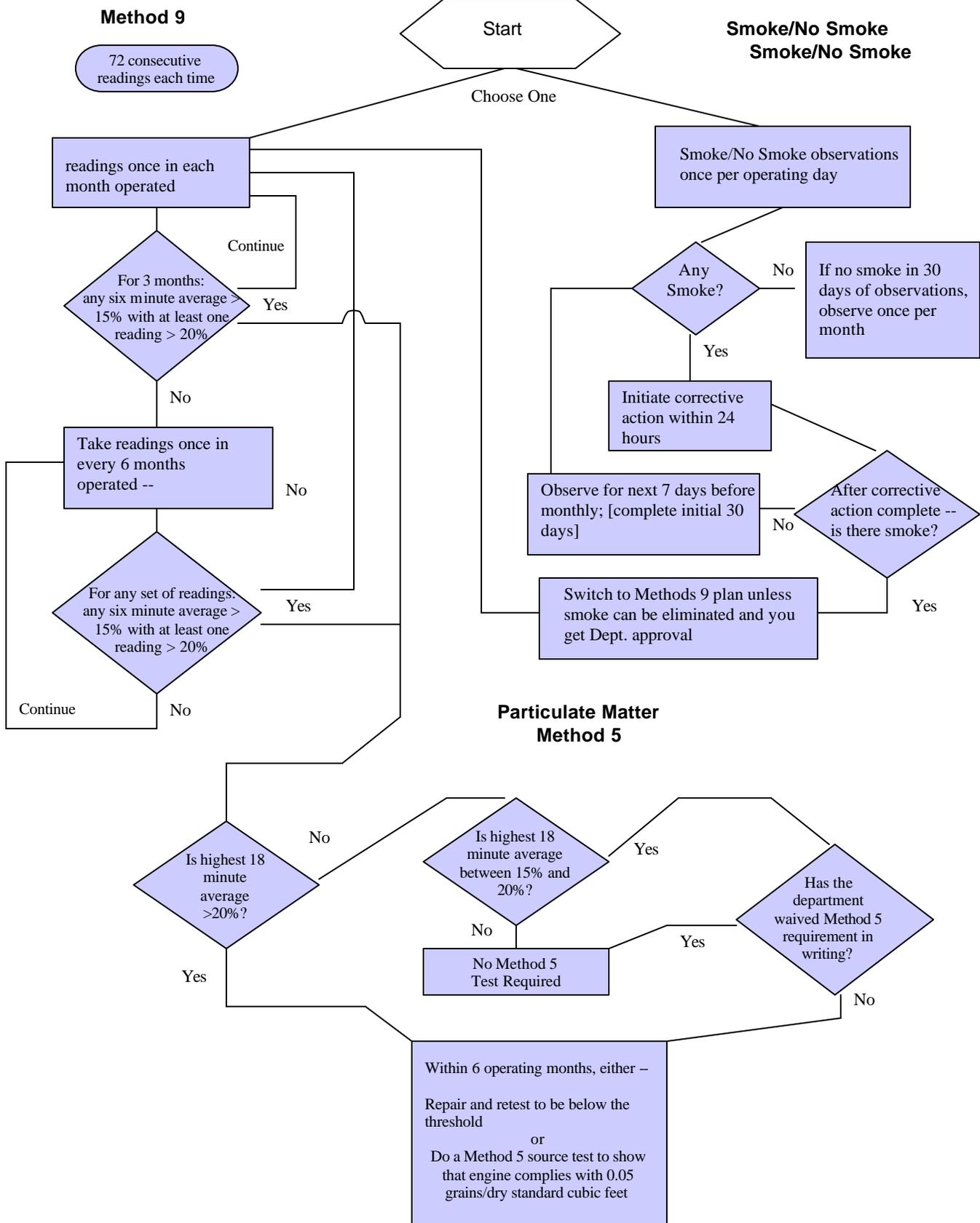
- 41.1 Within six calendar months that the engine operates after exceeding the criteria of condition 41.2a or 41.2b, either
- a. conduct a PM source test according to conditions 10 - 14; or
  - b. make repairs so that emissions no longer exceed the criteria of condition 41.2; to show that emissions are below those criteria, observe emissions as described in condition 38.1 under load conditions comparable to those when the criteria were exceeded.
- 41.2 Conduct the test according to condition 41.1 if
- a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or
  - b. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the department has waived this requirement in writing.
- 41.3 During each one hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one hour test run. Submit a copy of these observations with the source test report.
- 41.4 The source test requirement in condition 41.1 and 41.2 is waived for an engine if a PM source test on that unit has shown compliance with the PM standard during this permit term.

**42. Particulate Matter Reporting for Diesel Engines.** The permittee shall report as follows:

- 42.1 report under condition condition 37 for excess emissions and permit deviation reports
- a. the results of any PM source test that exceeds the PM emissions limit;  
or

- b. if one of the criteria of condition 41.2 was exceeded and the permittee did not comply with either condition 41.1a or 41.1b, this must be reported by the day following the day compliance with condition 41.1 was required;
- 42.2 report observations in excess of the threshold of condition 41.2b within 30 days of the end of the month in which the observations occur;
- 42.3 in each facility operating report, include
  - a. the dates, source IDs, and results when an observed 18-minute average was greater than an applicable threshold in condition 41.2;
  - b. a summary of the results of any PM testing under condition 41; and
  - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of condition 41.2, if they were not already submitted.

### Visibility and Particulate Monitoring Flow Chart



**Attachment 5. Application Addendum (Location Change)**

Submit the information specified below to the Department's Air Permit Program Compliance Section, 610 University Avenue, Fairbanks, Alaska 99709-3643 *ten* days before moving of the plant to any new location, and the exact date before startup by telephone, fax, e-mail or letter.

Name of Firm: \_\_\_\_\_ Permit Number \_\_\_\_\_

Make and Model of the Equipment/Facility to be relocated \_\_\_\_\_

Contact Person: \_\_\_\_\_ Telephone: \_\_\_\_\_

New plant location (Street address, Milepost number etc. **Include site maps**):  
\_\_\_\_\_

Approximate start-up and shut-down dates: \_\_\_\_\_

**Distance from Plant boundary to nearest inhabited structure \_\_\_\_\_yards**

**Nearest inhabited structures are on (check one) \_\_\_ flat or \_\_\_ elevated terrain**

**Attach approvals or conditional use permits from Borough where plant is to be located.**

Comments: \_\_\_\_\_

I hereby certify that the information contained in this notification to the best of my knowledge and belief, is true, complete, and accurate. **I have taken the information in Condition 33 into account in the site selection for this plant relocation.**

Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_ Telephone: \_\_\_\_\_

State of Alaska, City of \_\_\_\_\_, Borough of \_\_\_\_\_

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared \_\_\_\_\_

Whose identity was proved to me on the basis of satisfactory evidence to be the person  
Whose name is subscribed to this instrument, and acknowledged that he (she) executed  
the same.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
My Commission Expires on

## ATTACHMENT 6

### QUALITY ASSURANCE PLAN REQUIREMENTS FOR CARBON MONOXIDE AND OXYGEN CONTINUOUS EMISSION MONITORS FOR SOIL THERMAL TREATMENT UNITS Reference: 40 C.F.R. 60, Appendices B & F.

1. CO/O<sub>2</sub> CEM span values not to exceed (NTE) 250ppm, and NTE 25% O<sub>2</sub>.
2. A relative accuracy test audit (RATA) must be conducted within 90-operating days of startup, and once every 4 operating quarters if CO averages 50ppm or more.
3. A 3-point Calibration is required every 90-operating days. Calibration gas to be certified reference method (CRM) or Protocol 1 gas. Maximum strength is 150ppm CO and 25% O<sub>2</sub>. Calibration can be conducted coincident with a cylinder gas audit (CGA).
4. A CGA is allowed in lieu of a relative accuracy audit if the CO averages less than 50ppm.
5. For a CGA with CRM or protocol 1 low range audit gas, the low range CO concentration must be anywhere from 15 to 45ppm and from 75 to 150 ppm for the high range audit gas. Clean ambient air can be zero gas.
6. Use a CO wand at least every 90-operating days to check for leaking fittings or valves on sample line. Also leak check just after sample line fitting or inline valve setting is changed.
7. Table of daily calibration drift limits.

#### DAILY CALIBRATION DRIFT LIMITS\*

Time Period	CO ppm. Must be the lessor of: % of Span, or (ppm for 250ppm span)	% O <sub>2</sub>	Action Required****
6 out of 7 consecutive days**	5 (12.5)	0.5***	Adjust
One day	10 (25)	1.0	Adjust
5 consecutive days	10 (25)	1.0	Out of control repair/replace
One day	20 (50)	2.0	Out of control repair/replace

\* To be conducted at the zero and high-level values. See above reference.

\*\* 7 - day drift test with out adjustment.

\*\*\* for 7 out of 7 consecutive days.

\*\*\*\* when limit is exceeded.

## ATTACHMENT 7: Source Test Operational Parameter Recording

**Continuously monitor the following parameters and record the average value**

- the contaminated soil processing rate: \_\_\_\_\_ tons/hour (if the facility processes contaminated soil)
- water flow rate(s) used to spray processed soil for particulate control: \_\_\_\_\_ gallons/minute
- the fines percentage \_\_\_\_\_ [<200 mesh using ASTM 422-63(1990)]
- Perform Method 9 opacity readings, 10 6minute averages for each Method 5 test run. Compute the Average hourly opacity for the Method 5 test.

**For a facility using a baghouse:**

- the baghouse exit temperature: \_\_\_\_\_ EF
- the pressure drop across the baghouse: \_\_\_\_\_ inches of water

**For a facility using a scrubber:**

- the pressure drop across the scrubber: \_\_\_\_\_ inches of water
- water flow rate: \_\_\_\_\_ gallons/minute

**Obtain the following information:**

- obtain a representative sampling of the fines percentage (-200 mesh)

**For a facility using a scrubber, record the following parameters:**

- pond size: \_\_\_\_\_
- pond depth: \_\_\_\_\_
- type of liner used: \_\_\_\_\_
- is the water recycled  Yes  No

makeup water flow rate: \_\_\_\_\_ gallons/hr